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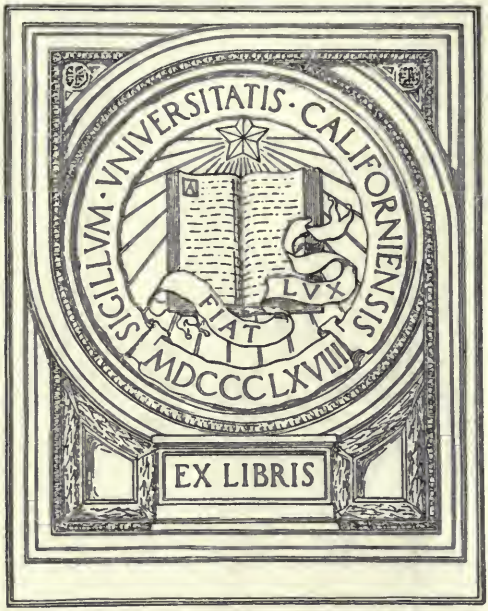
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UNIVERSAL METERING OF CHICAGO'S WATER SUPPLY

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THE NEED FOR IT
WHAT IT WOULD ACCOMPLISH

CHICAGO BUREAU OF PUBLIC EFFICIENCY
315 PLYMOUTH COURT

JULY, 1918

CHICAGO BUREAU
OF
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UNIVERSAL METERING
OF
CHICAGO'S WATER SUPPLY

THE NEED FOR IT—WHAT IT WOULD ACCOMPLISH

PROVISIONS OF THE PENDING ORDINANCE.

There is pending in the City Council an ordinance to amend certain sections of the City Code relating to the service furnished by the Chicago Water Works. Several of the amendments consist of minor changes which are necessary to make the sections affected thereby harmonize with amendments contained in other sections. The more important changes proposed are as follows:

(a) Services to all new buildings hereafter connected with the water mains to be provided with meters.

(b) Services to all old buildings, so far as practicable, to be equipped with meters at the rate of 10 per cent a year; the work to proceed by districts, all premises within a district to be metered without discrimination.

(c) Meters to be purchased, installed, and maintained by the City out of the water fund without expense to the consumer or property owner.

(d) The present meter rate of 6¼ cents per thousand gallons to be retained, with a minimum yearly charge of $4 per single household and $3 additional for each additional occupancy served by the same meter.

A change of lesser importance provides that occupants of metered premises may use the hose without restriction during any hour of the day.

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NEED FOR A POLICY OF UNIVERSAL METERING.

The need for adopting and carrying into effect a policy of universal metering is recognized by practically every one who has given thought to the question. The following are the main points urged in support of such a policy:

The Chicago Water Works is pumping an average of 260 gallons of water daily for every man, woman, and child in the city. This is about twice as much water per person as most other American cities find ample to supply their requirements. Cleveland and Milwaukee, lake cities where conditions of supply and distribution are similar to those in Chicago, and where universal metering prevails, have a daily pumpage of less than 125 gallons per person. And their service is much better than ours.

Not more than half the water pumped in Chicago is ever really used. The other half is lost through waste and leakage. This loss is due to leaks in the pumps, in the mains and service pipes, and in house plumbing. It is due also in some cases to either careless or wilful waste on the part of consumers. Meters are proposed as a means of locating and checking so far as practicable this loss of water which is of no use to any one. They are not intended to discourage the use of water in abundance, and experience in other cities shows that they do not in fact discourage such use.

Any one can go to Lake Michigan and take as much water as he likes. The business and the problem of the Chicago Water Works is to transport water from the lake to the premises of consumers and to deliver it under sufficient pressure to enable users, including those living upon upper floors, to get it whenever they need it.

WASTE AND LEAKAGE RESULT IN LOW PRESSURES.

At present the service furnished by the water works is not satisfactory in many sections of the city. Consumers living near pumping stations or adjacent to large supply mains usually have little cause for complaint. Those not so situated, particularly if they live above the first or second floor, are frequently without water.

These conditions are not due to a shortage of pumping facilities. The pumps now operating have twice the capacity required to furnish water in abundance to every one in the city. The trouble is caused by a lack of pressure, which in turn is due to overtaxing the pumps and the mains with the transportation of the enormous amount of water which is not made use of but which is lost through waste and leakage.

The high velocities at which the water is required to flow through the mains create an excessive amount of friction between the water and the pipes, and this friction cuts down the pressure under which the water leaves the pumping station, so that by the time the water reaches the point of consumption the pressure is insufficient to deliver it to upper floors.

REDUCING WASTE AND LEAKAGE, NOT ADDING MORE PUMPS, WILL SOLVE THE PRESSURE PROBLEM.

If the present loss through waste and leakage is reduced, less water will have to be pumped, velocities will be lower, friction losses will be less, and the pressure under which the water will be delivered to consumers will be correspondingly higher. The increased pressures which will result will mean the difference between water delivered at the street level and water delivered upon upper floors where people need it. The elimination of unnecessary waste and leakage will result in every one

in the city having an abundance of water at all times. Such a condition has never existed in Chicago and never will exist until universal metering is put into effect.

Efforts to remedy existing conditions by adding more pumps have resulted in doubling the pumping capacity of the plant within the past fifteen years, while during this time the population has increased only 40 per cent. These efforts, however, have been only partially successful, and engineering authorities are agreed that similar efforts in the future are not likely to prove more effective.

Adding more pumps will only increase the leakage without materially improving conditions. Raising the pressure at the pump end of a seive-like system merely means forcing more water through the holes of the seive, and the added force is lost before the water reaches the spigot.

Satisfactory service demands a tight system so that the pressure imparted by the pumps may be delivered with a minimum loss at the premises of consumers situated at points remote from the pumping station.

WASTE AND LEAKAGE RESULT IN HEAVY FINANCIAL LOSS.

Not only do waste and leakage seriously cripple service but they also result in an enormous financial loss which must be borne by the consumers.

The cost of constructing, maintaining, and operating the water works system depends upon the volume of water pumped. The water itself is free. What consumers pay for is the cost of transporting it to points where they can use it. And it costs just as much to provide and operate equipment with which to pump and transport water that is afterward lost through waste and leakage as it does to pump and transport water that is actually used.

In order to provide and operate pumping equipment and mains for the transportation of the water now needlessly lost through waste and leakage, the City has already spent millions of dollars, and many millions more must be spent in the future unless something is done to check unnecessary losses of water.

Not less than 100,000 tons of coal are consumed annually in the pumping of water that is never used by any one. The need for fuel conservation in the future will be apparent to every one.

REDUCING WATER WASTE VS. INCREASED WATER RATES.

Expenditures from the water fund since the beginning of 1915 have exceeded the water revenue by nearly $4,000,000. In 1917 there was a deficit which necessitated the borrowing of $500,000 on water certificates, and it will be necessary to borrow a like amount, and possibly more, during 1918. The present depleted condition of the water fund is due largely to the drain upon it for tunnels, pumps, and mains that would not be required but for the excessive amount of waste and leakage which prevails.

If through universal metering this waste and leakage can be brought under reasonable control within the next 10 years, as is contemplated by the pending ordinance, the construction of tunnels, pumping stations, and mains can be largely stopped for a long period, and the net saving which will result, even after the cost of installing, maintaining, and reading the meters is taken into account, will mean that an increase in water rates can be avoided. The aggregate net saving between now and 1950 is estimated at not less than $135,000,000.

On the other hand, unless waste and leakage can be curtailed, the pumping equipment and mains will have to be increased on a very large scale, and since the present

revenue of the water fund is proving inadequate to meet the expenditures involved in such a program, and it is going to be impossible to continue to finance recurring annual deficits through loans, obviously *water bills to flat rate consumers must be increased* to meet such expenditures.

METERING A WASTE PREVENTION MEASURE.

Meters are proposed as a means of locating and checking unnecessary waste and leakage which now occur in the mains, house plumbing, and other places. They are not proposed for the purpose of restricting usage. Water should be furnished in abundance and its use encouraged. The transportation of unused water is what threatens to force higher water bills. With unnecessary waste and leakage eliminated, water can be furnished in abundance and so cheaply that no one need think of restricting his customary use of it.

Meters provide an effective and economical method of locating and preventing waste and leakage. They make for permanent results. They bring about an equitable distribution of water charges. Each consumer pays for the service that he receives, and no more. No other method of waste prevention has ever proved so generally satisfactory as metering.

THE OBJECTIONS TO METERS.

Alleged objections to meters are frequently heard. But these *objections always come from cities where meters have not been used.* All the arguments advanced against meters today in Chicago have been heard in other cities where metering has been proposed, but whenever meters have been subsequently introduced experience has shown that there was and is no basis for the objections raised.

The two objections most frequently advanced are (1) that meters will result in skimping on the use of water to the detriment of health and sanitation, and (2) that water bills will be increased. Experience refutes both these claims.

METERS WILL MEAN BETTER CONDITIONS OF HEALTH AND SANITATION.

The amount of water legitimately used and not the amount of water pumped but subsequently lost through waste and leakage is what makes for satisfactory conditions of health and sanitation. The recent statement made to the Finance Committee by Dr. H. N. Bundesen of the Health Department staff is significant on this point. Dr. Bundesen advocated metering as a health measure, and in support of his position said in substance that the present low pressures, due to waste and leakage, cause a shortage of water for flushing toilets and other purposes on the upper floors of buildings and that the insanitary conditions which result are a serious menace to the health and welfare of the community. Dr. Bundesen said also that his investigations showed that in more than 100 cities where meters had been installed, and the water service thereby improved, health conditions had also improved.

Statistics show that Milwaukee, which is completely metered, is one of the five healthiest large cities in the country.

Information from Cleveland, which is also completely metered, shows conclusively that the meters do not result in skimping on the use of water in that city.

Oak Park too is metered, but no one familiar with conditions there would think of Oak Parkers as people who used too little water from the health standpoint. And yet at the rate of 6¼ cents per thousand gallons, provided

in the pending ordinance, the average amount of water used in Oak Park households can be purchased for $4 per year. These illustrations could be multiplied many times.

In order to remove any possible incentive for any one to skimp on the use of water, the pending ordinance provides for a yearly minimum charge of $4 per household—in other words, the consumer will be required to pay for $4 worth of water whether or not he uses it, so he may as well use it. And $4 will purchase all the water that an ordinary family can use.

Meters accomplish results not by restricting the use of water but by eliminating leaks and wilful waste.

There is a popular notion that the water which is lost through waste and leakage is of value in flushing sewers. On the contrary, much of it escapes through the ground and never enters the sewers, and that which does trickle in is of no use for flushing purposes.

METERS WILL MEAN LOWER WATER BILLS.

There is a prevalent belief *where meters have not been introduced* that they operate to increase water bills. As a matter of fact, meters usually result in lower bills, particularly to the smaller consumers, who under the flat rate plan pay a large proportion of the cost of pumping the water lost through waste and leakage. With the reduction of this loss which follows the installation of meters less money is required to operate, maintain, and construct the water works plant, and therefore lower charges are possible.

The most effective way to meet this alleged objection is to compare Chicago flat rates with meter charges in Cleveland, Milwaukee, and Oak Park; also with charges in portions of Chicago, like Austin and Morgan Park,

where meters are in service upon a large number of residences and small flat buildings.

The Chicago flat rate charge for a one-family residence 21 to 24 feet in width and two stories in height, having one complete set of four fixtures, is $5.64 a year. If a hose is used the charge is $7.14. This charge would cover any small house or cottage having two finished rooms on the second floor, and is typical of what thousands of small property owners pay.

An ordinary two-flat or apartment building, having two complete sets of fixtures, is charged $10.88 a year; if a hose is used the charge is $12.38. Larger buildings or additional fixtures, of course, result in higher rates.

Under the meter plan, two-thirds of the consumers in Cleveland pay $5 or less annually for the water which they take.

In Milwaukee nine-tenths of the consumers pay less than $10 for their year's supply; three-fourths of them pay less than $5; half of them pay less than $3.

At the Chicago meter rate of 6¼ cents per thousand gallons, the average amount of water used in 4500 residences in Oak Park can be purchased for $4 per year. Of course, the bills are actually higher in Oak Park, because the rate there is 18 cents per thousand gallons.

An examination of the accounts of 1300 residences now under meter in Austin and Morgan Park shows that more than half of them pay less than $4 a year; in fact, about one-third of them pay less than $3. The average yearly charge per residence was found to be $4 in Morgan Park and about $4.50 in Austin.

The accounts covering 100 two-apartment buildings in —Austin showed an average charge of $5.70 annually— about half the flat rate charge for buildings of this class.

Landlords are often apprehensive that when their

premises are placed under meter the tenants will waste water to such an extent as to seriously penalize the owner who must pay the bill.

There is abundant testimony both from persons living in other cities where metering is in effect and from Chicago landlords who have had experience with meters to the effect that the landlord who keeps his plumbing in reasonably good repair, as required by the city ordinances, has nothing to fear from the wasteful or careless practices of his tenants. In some of the larger apartments, which are equipped with several baths and other unusual facilities for using water, the present flat rate charges may be insufficient to pay for the water used. In such cases an increase in the bills may be expected when a meter is installed. But both the experience of other cities and the records of the Chicago Water Works covering apartments now under meter show that the owners of buildings with ordinary facilities for the use of water profit by the meter plan.

METERS ENTIRELY SATISFACTORY WHERE THEY ARE IN USE.

In cities where meters are in use no objections have been found to them. On the contrary, they have proved entirely satisfactory to the consumers and to the municipalities alike.

The experience of Cleveland, as recently explained to the Finance Committee by Prof. Edward W. Bemis, who was superintendent of the Cleveland water works at the time meters were installed in that city, is typical of what has occurred in many other cities.

Prof. Bemis said that the usual arguments against meters were urged in Cleveland and that there was much fear that they would prove unsatisfactory. But, he said, as soon as the work started every one was so pleased

with the results that opposition to going ahead with the installations immediately died out and subsequent requests for meter appropriations were provided by the City Council as a matter of course. Prof. Bemis also pointed out that, if meters had not been satisfactory to the consumers, the program could not have been carried out, since it involved expenditures extending over a period of years, and the City Council in response to popular protest would have withheld the appropriations necessary for the work.

IN CONCLUSION.

The passage of the pending ordinance will pave the way to greatly improved water services by making possible higher pressures. It will also result in an enormous aggregate financial saving to the community, which in turn will mean lower water bills to thousands of consumers, particularly small consumers, who under the flat rate plan are paying too much for the water that they use. The Chicago Bureau of Public Efficiency is convinced that there are no valid objections to meters and that when installed they will prove entirely satisfactory to the people of this city. The Bureau believes that the ordinance should pass. The actual installation of the meters will proceed gradually and the work probably cannot be completed in less than 10 years. If after a fair trial meters are found unsatisfactory, the Council will still have the power to stop further installations. If metering is not adopted increased water rates will be unavoidable.

ENDORSEMENTS BY CIVIC ORGANIZATIONS.

WOMAN'S CITY CLUB APPROVES METER PLAN.

Chicago, Ill.,
July 9, 1918.

Honorable John A. Richert,
Finance Committee Room,
City Hall, Chicago.

Dear Sir:

When the question of installing water meters was under discussion in the City Council some years ago, the Woman's City Club, convinced of the wisdom of the plan, expressed approval of it.

During the present discussion, representatives of this club have appeared before the sub-committee and the Finance Committee in support of this metering proposal. Statements favoring the plan have been published by the club and given circulation among its hundreds of members and addresses have been delivered before the club fully interpreting the proposed plan for metering.

The enormous amount of waste which the City's engineers tell us now exists; and the consequent waste of coal which is unpatriotic; the present necessity for conserving fuel, labor and materials, the experience in Cleveland and Milwaukee, the testimony of householders in Oak Park and Austin who have used meters for years, all convince us that the only solution is the installation of water meters.

We are further convinced that the INSTALLATION OF WATER METERS WILL NEITHER INCREASE WATER RATES TO HOUSEHOLDERS AND LANDLORDS NOR WILL IT INDUCE THE SKIMPING ON WATER USED FOR DOMESTLC PURPOSES.

We desire to express our appreciation and gratitude for the vigerous way in which the sub-committee of which Mr. Capitain is chairman and the Finance Committee under your leadership have approached this subject, and desire to assure you and the Finance Committee our hearty support.

Respectfully,

AMELIA SEARS,
Civic Director.

RESOLUTION ADOPTED BY THE EXECUTIVE COMMITTEE OF THE CHICAGO ASSOCIATION OF COMMERCE, JUNE 20, 1918.

"WHEREAS, The Municipal Improvements Committee on April 2 passed a resolution favoring the metering of Chicago's water supply, as recommended in the report of the Chicago Bureau of Public Efficiency dated December 1917, and

"WHEREAS, The Engineers' Subdivision of the Association has given study to this same question for more than a year, and on June 3 adopted a resolution favoring the installation of meters as recommended in the report of the Chicago Bureau of Public Efficiency; now therefore be it

"RESOLVED, That The Chicago Association of Commerce favor the general plan of metering the water supply of the City of Chicago as recommended in the report of the Chicago Bureau of Public Efficiency; and be it further

"RESOLVED, That copies of this resolution be sent to the Mayor and the City Council."

CHICAGO POLITICAL EQUALITY LEAGUE FAVORS UNIVERSAL METERING.

WHEREAS, It appears from a report recently published by the Chicago Bureau of Public Efficiency that the Chicago Water Works supplies about twice as much water per person as other large cities in this country find necessary in order to provide an abundant supply for every legitimate need, and that more than half the water pumped in Chicago is lost through waste and leakage and is of no use whatever to any one; and

WHEREAS, It also appears from said report that the pumping of the vast amount of water now lost through waste and leakage results in low pressures and a shortage of water, and necessitates the expenditure of millions of dollars for tunnels, pumping machinery, and water mains which otherwise would not be needed, and also requires the expenditure of hundreds of thousands of dollars annually for coal, labor, and supplies, more than 100,000 tons of coal being consumed each year in pumping and transporting, from the lake to the premises of consumers, the water thus lost through waste and leakage; and

WHEREAS, It is important to stop the unnecessary waste and leakage which now prevail in order to conserve the supply of coal and other resources of the country; and

WHEREAS, It is the experience of other cities that by the installa-

tion of meters this waste and leakage can be stopped without restricting persons in their accustomed use of water; that meters will accomplish results by eliminating unnecessary waste and leakage and not by limiting usage; that they will not increase the water bills of the ordinary householder but that, on the contrary, they will mean an abundant supply of water for every one and lower water bills for thousands of consumers, particularly small consumers, while the aggregate net saving to the community will be many millions of dollars; and

WHEREAS, The Board of Managers of the Chicago Political Equality League believes that if through the installation of meters the water users of Chicago were taught to use water with reasonable care and to avoid unnecessary waste and leakage it would not only conserve coal and other resources now being consumed in pumping waste water, but would tend to promote the general movement for thrift, economy, and conservation of resources, so important at this time; therefore be it

RESOLVED, By the Board of Managers of the Chicago Political Equality League that it hereby endorses the policy and program for universal metering recommended by the Chicago Bureau of Public Efficiency in its report of December, 1917, on the Water Works System of the City of Chicago; and also that it hereby urges the City Council of the City of Chicago to enact such ordinances as may be necessary to put such policy and program into effect.

CIVIC FEDERATION URGES PASSAGE OF ORDINANCE.

(*From Bulletin, Civic Federation of Chicago, July 1918.*)

"Citizens of Chicago who desire to avoid the possibility of increased water rates, should write at once to the two aldermen from their respective wards, urging them to vote for the pending ordinance providing for installation of water meters throughout the city at the expense of the Water Fund.

"Believing that the installation of meters throughout the city is essential to efficient management of the city water works system; that it is scientifically sound in principle, and that it will work for the best interests of citizens generally, the Civic Federation of Chicago endorses universal metering and urges the enactment of the proposed ordinance. It is only fair that each consumer should pay for what he gets and pay for only what he gets. Under the present system a fair deal is impossible. For this reason citizens are urged to write to their aldermen asking them to support this ordinance."

ENDORSED BY THE CITIZENS' ASSOCIATION OF CHICAGO.

Chicago, June 7, 1918.

Hon. Henry D. Capitain,
Chairman Council Sub-Committee on the
Metering of Water,
Council Committee Rooms,
City Hall.

Dear Sir:—

I am directed by the President of the Citizens' Association of Chicago to inform you that at a recent meeting of the Board of Directors of this Association, that Board, after careful consideration of the subject matter, voted to give the hearty endorsement of the Citizens' Association to the recommendation of the Chicago Bureau of Public Efficiency set forth in its report of December, 1917, entitled "The Water Works System of the City of Chicago," in favor of the adoption by the City of Chicago of a policy providing for the universal installation of water meters throughout the City, that installation to be completed, if possible, within a period of ten years.

The Citizens' Association has taken this position because of its belief that the universal metering of water pipes will be the means of preventing an increase in water rates; overcoming the present shortage of water by reducing waste; and will prove to be an important measure of economy to the City and to a large number of small consumers.

Very truly yours,

SHELBY M. SINGLETON,
Secretary.

CHICAGO NEWSPAPERS COMMENT FAVORABLY ON METER PLAN.

(Editorial from The Chicago Daily News of June 25, 1918.)

THE WATER METERING ORDINANCE.

The finance committee of the city council is to be commended for the good sense and constructive intelligence it evinced in recommending the enactment of an ordinance that provides for the gradual adoption of "universal" metering of water. For more than fifteen years this legislation has been urged on the city by engineers and other men who know as the only means by which relief from serious waste of water can be obtained in consonance with sound principles of municipal administration. At last the finance committee definitely approves the metering program, and this approval should carry weight with those aldermen who have not had as much opportunity to study the question as have the members of the committee on gas, oil and electric light, or those of the finance committee.

There should be no needless delay in passing the proposed water meter amendments to the city code. The recurrent plaint heard every summer regarding insufficient pressure and a shortage of water should be obviated as soon as possible.

The amendments advocated by the Chicago Bureau of Public Efficiency are these: Meters shall be installed for all new services on and after August 1. All old services shall be metered at the approximate rate of 10 per cent a year. The present rate of 6¼ cents for 1,000 gallons to be maintained, but with a minimum charge of $4 where a meter serves a single family. The cost of the installation and repair of meters is to be borne by the city and charged up to the consumers among other legitimate items of expense in the waterworks system.

This program is designed to give early relief to some sections of the city and to bring about universal metering in a period of ten years. The minimum charge recommended is substantially lower than the present flat charge applicable to thousands of small families. Metering will save money to the city and to its householders alike, while it will insure an abundant supply of water for all proper purposes.

(Editorial from the Chicago Tribune of July 9, 1918.)

THE QUESTION OF WATER METERS.

The Chicago Bureau of Public Efficiency, in its report on the Chicago water system, has presented some very cogent arguments for the universal metering of water in this city. If these arguments are sound—and they seem to be verified by careful investigation—the opposition must rely for its support on sentiment or selfish special interest.

For many years our city engineers have advocated the more general extension of metering, but various civic organizations, and especially women's clubs, have succeeded in making an effectual protest. Due largely to the

propaganda work of the Bureau of Public Efficiency, a majority of these organizations have now reversed their attitude. The city council finance committee, moreover, has recommended for passage an ordinance based on the Efficiency Bureau's report.

The principal reason for advocating a change from our present system is that it encourages extravagant and preventable waste. The figures show that, with a single exception, Chicago pumps more water daily than any other city in the country. Our per capita daily consumption in 1916 was 258 gallons, whereas in New York it was 101 gallons and in Oak Park, which doubtless has as great a reputation for cleanliness as Chicago, it was only 70 gallons.

In insisting that Chicago is extravagant and wasteful, the Bureau of Public Efficiency asserts that metering would not curtail any legitimate use. For a large percentage of users it would actually reduce their water bills. The great advantage of metering is that it would induce careless householders and building owners to keep their plumbing in good order.

The finances of the water department are rapidly approaching a critical state. The government is asking for the greatest possible conservation of coal. These considerations would seem to give the arguments for universal metering a great deal of weight.

(*From Chicago Herald and Examiner July 5, 1918.*)

The Guide Post

Conducted by
JAMES WEBER LINN

WATER METERS.

* * * *

This ordinance was introduced to stop waste. Waste of city water is of two sorts—individual and general.

Individual waste occurs after the water is delivered to the consumer's premises, and results from leaky plumbing and from willful "letting the water run." * * * Metering would practically eliminate individual waste.

General waste occurs in the street system itself. It can only be eliminated by constant watchfulness. With the present system this watchfulness is practically impossible. There is no quick way of discovering where leaks are.

But with general metering watchfulness would be far easier. Put water meters on mains and service pipes, and calculate the water pumped in and the amount individually used; the places of losses are thus readily discoverable.

95,000 TONS OF COAL WASTED.

Is the waste worth bothering about? Cleveland and Milwaukee, both lake cities, pump 113 and 118 gallons per person a day, respectively; Chicago much more than twice that. During 1916 it cost Chicago more than $500,000 just to pump water WHICH NOBODY USED. It took 95,000 tons of coal to pump water WHICH LEAKED AWAY. Some of this waste and leakage is inevitable; but, by metering, at least 75 per cent of it can be prevented.

It is not desirable to restrict the USE of water. If metering restricted use, it would be unwise. But where it has been adopted it has not cut down use. In Chicago it would actually increase use to many.

For, as things are now, very often in summer, on third and higher floors no water at all is to be had. That unfortunate condition would disappear with the greater pressure that comes with the stoppage of waste.

But there is a general feeling that metering would increase water bills. One hears wild rumors. They are wild.

The flat-rate charge in Chicago for thousands of small houses is $5.64; with a hose, $7.14. A two-flat building is charged $10.88 a year; with a hose, $12.38. About two-thirds of all consumers in Cleveland, which is metered pay FIVE DOLLARS A YEAR OR LESS.

LOWER RATES LIKELY.

The Oak Park records of water used are accessible. In Oak Park the people generally are well-to-do and cleanly and comfortable. They use water lavishly. They admit it. At the water rate in the proposed ordinance three-fourths of the Oak Parkers would pay LESS THAN FIVE DOLLARS A YEAR. The average yearly charge for residences would be $4, and for apartment buildings of all sizes about $8.50. Compare that with our flat rates of $7.14 and $12.38.

In three sections of Chicago where meters have been installed the records covering 100 two-flat buildings show an average of $5.70 a year.

This is an apartment house city, like others; and landlords frequently oppose metering because they are afraid their tenants will waste water and so increase bills. So far as collected accounts are proof, the tenant would have a better pressure, and the landlord would often save money, by universal metering.

To get universal metering will take ten years, perhaps. But we shall never have it unless we make a start; and unless we adopt it as a POLICY we must go on building tremendous and costly new pumping stations, and throwing away mines full of coal, JUST TO KEEP UP WITH OUR OWN WASTE.

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